

Application No. 09/998,855

Response Dated: March 7, 2005

Reply to Office Action Dated December 23, 2004

BEST AVAILABLE COPY

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A catalyst composition comprising a polymerization catalyst and at least one gelling agent; wherein the gelling agent is selected from of the group consisting of: diester phosphates, steroid and anthryl derivatives, amino acid-type gelators, and tetraoctadecyl ammonium bromide, and wherein said polymerization catalyst is selected from the group consisting of ~~conventional type transition metal catalyst compounds and~~ metallocene catalyst compounds.
2. (Cancelled)
3. (Currently Amended) The A catalyst composition of claim 1 comprising a polymerization catalyst and at least one gelling agent wherein the gelling agent is selected from the group consisting of: ~~dihexadecylaluminum ortho-phosphate~~, 2,3-bis-n-decyloxy-anthraquinone, (OH)Al(ROPOR')₂; (Et)Al(ROPOR')₂; (Et)Al(ROPOR)₂; and Mg(ROPOR')₂, where R is C₁₂₋₂₀H₂₁₋₃₇ R' is CH₃, 2,3-bis-n-decyloxy-anthracene, cholesteryl 4-(2-anthryloxy) butanoate and cholesteryl anthraquinone-2-carboxylate, wherein said polymerization catalyst is selected from the group consisting of metallocene catalyst compounds.
4. (Cancelled)
5. (Previously Presented) The catalyst composition of claim 1 wherein the polymerization catalyst is a supported polymerization catalyst comprising a carrier,

2000U055.US.1.111.3.7.05.doc

- 2 -

Application No. 09/998,855

Response Dated: March 7, 2005

Reply to Office Action Dated: December 23, 2004

BEST AVAILABLE COPY

wherein said support is selected from the group consisting of talc, inorganic oxides, and inorganic chlorides.

6. (Currently Amended) A method for making a catalyst composition, the method comprising the steps of:

- (a) forming a polymerization catalyst; and
- (b) adding at least one gelling agent, wherein the gelling agent is selected from of the group consisting of: diester phosphates, steroid and anthryl derivatives, amino acid-type gelators, and tetraoctadecyl ammonium bromide, and wherein said polymerization catalyst is selected from the group consisting of ~~conventional-type transition-metal catalyst compounds~~ and metallocene catalyst compounds.

7. (Currently Amended) The A method of claim 6 for making a catalyst composition, the method comprising the steps of:

- (a) forming a polymerization catalyst; and
- (b) adding at least one gelling agent, wherein the polymerization catalyst comprises a carrier, and wherein the gelling agent is selected from the group consisting of: dihexadecylaluminum—ortho—phosphate, 2,3-bis-n-decyloxy-anthraquinone, (OH)Al(ROPOR')₂; (Et)Al(ROPOR')₂; (Et)Al(ROPOR)₂; and Mg(ROPOR')₂, where R is C₁₂₋₂₀H₂₁₋₃₇ R' is CH₃, 2,3-bis-n-decyloxy-anthracene, cholesteryl 4-(2-anthryloxy) butanoate and cholesteryl anthraquinone-2-carboxylate, wherein said polymerization catalyst is selected from the group consisting of metallocene catalyst compounds.

8-18. (Cancelled)

19. (Previously Presented) The method of Claim 6, wherein step (b) takes place in a liquid prior to addition to a polymerization reactor.

Application No. 09/998,855

Response Dated: March 7, 2005

Reply to Office Action Dated December 23, 2004

BEST AVAILABLE COPY

20. (Previously Presented) The method of Claim 19, wherein the liquid is selected from the group consisting of mineral oil, toluene, hexane, isobutene, and mixtures thereof.
21. (Cancel)
22. (Cancel)
23. (Currently Amended) The catalyst composition of claims 1, 3, 5, 6, 7, 19, or 20, or 23, wherein said gelling agent excludes mono- ~~or~~ and di- or tri-carboxylic acid salt with a metal counter ion ~~portion from the Periodic Table of Elements~~.
24. (New) A catalyst composition comprising a polymerization catalyst and at least one gelling agent; wherein the gelling agent is a diester phosphate, wherein said polymerization catalyst is selected from the group consisting of TiCl_4 , TiBr_4 , $\text{Ti}(\text{OC}_2\text{H}_5)_3\text{Cl}$, $\text{Ti}(\text{OC}_2\text{H}_5)\text{Cl}_3$, $\text{Ti}(\text{OC}_4\text{H}_9)_3\text{Cl}$, $\text{Ti}(\text{OC}_3\text{H}_7)_2\text{Cl}_2$, $\text{Ti}(\text{OC}_2\text{H}_5)_2\text{Br}_2$, $\text{TiCl}_3 \cdot 1/3\text{AlCl}_3$ and $\text{Ti}(\text{OC}_{12}\text{H}_{25})\text{Cl}_3$, MgTiCl_6 , chromium catalyst compounds, and metallocene catalyst compounds.
25. (New) A method for making a catalyst composition, the method comprising the steps of:
- (a) forming a polymerization catalyst; and
 - (b) adding at least one gelling agent, wherein the polymerization catalyst comprises a carrier, and wherein the gelling agent is dihexadecylaluminum ortho phosphate, wherein said polymerization catalyst is a metallocene catalyst compound.